AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of generating a synthetic key frame, comprising:

receiving a video stream from a first source and dividing the video stream into a plurality of sections, each section including a plurality of frames;

selecting a key region from each of the plurality of sections; and

combining the selected key region from each of the plurality of sections to form a synthetic key frame that includes each selected key region within the synthetic key frame, each selected ~~one of the key frame and the~~ key region corresponding to a portion of a frame smaller than a total frame size.

2. (Previously Presented) The method of generating a synthetic key frame as claimed in claim 1, further comprising receiving a video stream from a second source and dividing the video stream from the second source into a plurality of sections.

3. (Previously Presented) The method of generating a synthetic key frame as claimed in claim 2, further comprising selecting a key region output from the second source.

4. (Original) The method of generating a synthetic key frame as claimed in claim 1, wherein the section is a unit of segment.

Claims 5-17. (Canceled)

18. (Currently Amended) A hierarchical video summarizing method using a synthetic key frame, comprising:

dividing a video stream into a plurality of sections where each section includes a plurality of frames, and synthesizing a key region of each section into one image, to generate a synthetic key frame that includes each of the synthesized key regions from each section, wherein each key region corresponds to a portion of a frame smaller than a total frame size; and

assigning the synthetic key frame to a key image locator, a hierarchical summary list for describing lower summary structures, and structural information of the video stream.

19. (Original) The hierarchical video summarizing method using a synthetic key frame as claimed in claim 18, wherein the key image locator is a data structure for designating an image using a key region locator, a key frame locator and a synthetic key frame locator.

20. (Original) The hierarchical video summarizing method using a synthetic key frame as claimed in claim 18, wherein each hierarchical summary structure is represented by an image representative of a specific segment.

21. (Original) The hierarchical video summarizing method using a synthetic key frame as claimed in claim 18, wherein each component of the lower hierarchical summary list uses a hierarchical/recursive summary structure as a lower hierarchical summary structure.

22. (Original) The hierarchical video summarizing method using a synthetic key frame as claimed in claim 18, wherein the hierarchical summary structure has summary level information.

23. (Original) The hierarchical video summarizing method using a synthetic key frame as claimed in claim 18, wherein the hierarchical summary structure includes a fidelity value indicating how faithfully a part, represented by the lower hierarchical summary list, is expressed.

24. (Currently Amended) A method for providing a video browsing interface, comprising:

dividing a video stream into a plurality of sections, and synthesizing a key region representing content of each section into one image, to generate a synthetic key frame that includes each of the synthesized key regions from each section, wherein each key region represents important information regarding the respective frame; and

providing a user interface to a predetermined display to browse a video related to the generated synthetic key frame.

25. (Original) The method for providing a video browsing interface as claimed in claim 24, wherein the user interface provides the synthetic key frame in the form of view.

26. (Original) The method for providing a video browsing interface as claimed in claim 24, wherein the synthetic key frame is arranged in a time sequence, and the synthetic key frame is arranged in a tree shape.

27. (Original) The method for providing a video browsing interface as claimed in claim 24, wherein the synthetic key frame is assigned to each node in TOC form.

28. (Currently Amended) A non-linear video browsing method, comprising:

dividing a video stream into a plurality of sections where each section includes a plurality of frames, and synthesizing a key region representing content of each section into one image, to generate a synthetic key frame that includes each of the synthesized key regions from each section, each selected key region corresponding to a portion of a frame smaller than a total frame size;

providing a user interface to a predetermined display to browse a video related to the generated synthetic key frame;

selecting the synthetic key frame according to an input by a user; and

reproducing a segment represented by the selected synthetic key frame.

29. (Previously Presented) The non-linear video browsing method as claimed in claim 28, wherein the reproducing reproduces a segment related with constituent elements of the contents of the key frame selected by the user's input.

30. (Previously Presented) The method of generating a synthetic key frame as claimed in claim 1, wherein the synthetic key frame includes a selected key region from each of the plurality of sections.

31. (Previously Presented) The method of generating a synthetic key frame as claimed in claim 1, wherein each of the plurality of sections comprises a video frame, and the selected key region comprises a portion of the video frame.

32. (Previously Presented) The method of describing synthetic key frame data as claimed in claim 1, wherein the synthetic key frame includes a selected key region from each of the plurality of sections.

33. (Previously Presented) The method of describing synthetic key frame data as claimed in claim 32, wherein each of the plurality of sections comprises a video frame, and the selected one of the key region comprises a portion of the video frame.

34. (Previously Presented) The method of describing synthetic key frame data as claimed in claim 1, wherein the synthetic key frame includes one of a selected key region from each of the plurality of sections.

35. (Previously Presented) The method of describing synthetic key frame data as claimed in claim 34, wherein each of the plurality of sections comprises a video frame, and the selected key region comprises a portion of the video frame.

36. (Previously Presented) The hierarchical video summarizing method of using a synthetic key frame as claimed in claim 18, wherein the synthetic key frame includes a selected key region from each of the plurality of sections.

37. (Previously Presented) The hierarchical video summarizing method of using a synthetic key frame as claimed in claim 36, wherein each of the plurality of sections comprises a video frame, and the selected key region comprises a portion of the video frame.

38. (Previously Presented) The method of providing a video browsing interface as claimed in claim 24, wherein the synthetic key frame includes a selected key region from each of the plurality of sections.

39. (Previously Presented) The method of providing a video browsing interface as claimed in claim 38, wherein each of the plurality of sections comprises a video frame, and the selected key region comprises a portion of the video frame.

40. (Previously Presented) The non-linear video browsing method as claimed in claim 28, wherein the synthetic key frame includes a selected key region from each of the plurality of sections.

41. (Previously Presented) The non-linear browsing method as claimed in claim 40, wherein each of the plurality of sections comprises a video frame, and the selected key region comprises a portion of the video frame.

42-44. (Canceled)

45. (New) The method of generating a synthetic key frame as claimed in claim 1, wherein the synthetic key frame is a generated frame that is not provided in the received video stream.

46. (New) The method of generating a synthetic key frame as claimed in claim 1, further comprising:

transmitting the synthetic key frame from a server to a terminal.

47. (New) The method of generating a synthetic key frame as claimed in claim 46, wherein the terminal comprises a mobile terminal.